

Herve Aubin

List of Publications by Year in descending order

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56
papers

2,300
citations

279798

23
h-index

206112

48
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57
all docs

57
docs citations

57
times ranked

2944
citing authors

#	ARTICLE	IF	CITATIONS
1	Quasi-2D Colloidal Semiconductor Nanoplatelets for Narrow Electroluminescence. <i>Advanced Functional Materials</i> , 2014, 24, 295-302.	14.9	208
2	Universal Heat Conduction in YBa ₂ Cu ₃ O _{6.9} . <i>Physical Review Letters</i> , 1997, 79, 483-486.	7.8	200
3	Extracting Parameters from the Current-Voltage Characteristics of Organic Field-Effect Transistors. <i>Advanced Functional Materials</i> , 2004, 14, 1069-1074.	14.9	170
4	Infrared Photodetection Based on Colloidal Quantum-Dot Films with High Mobility and Optical Absorption up to THz. <i>Nano Letters</i> , 2016, 16, 1282-1286.	9.1	150
5	Nernst effect in metals and superconductors: a review of concepts and experiments. <i>Reports on Progress in Physics</i> , 2016, 79, 046502.	20.1	144
6	Angular Position of Nodes in the Superconducting Gap of YBCO. <i>Physical Review Letters</i> , 1997, 78, 2624-2627.	7.8	119
7	Electric-field-driven phase transition in vanadium dioxide. <i>Physical Review B</i> , 2011, 84, .	3.2	118
8	Observation of the Nernst signal generated by fluctuating Cooper pairs. <i>Nature Physics</i> , 2006, 2, 683-686.	16.7	109
9	Spin-Orbit induced phase-shift in Bi ₂ Se ₃ Josephson junctions. <i>Nature Communications</i> , 2019, 10, 126.	12.8	97
10	Electrolyte-Gated Colloidal Nanoplatelets-Based Phototransistor and Its Use for Bicolor Detection. <i>Nano Letters</i> , 2014, 14, 2715-2719.	9.1	94
11	Thermal Transport in the Hidden-Order State of URu ₂ Si ₂ . <i>Physical Review Letters</i> , 2005, 94, 156405.	7.8	89
12	Magnetic-field-induced quantum superconductor-insulator transition in Nb _{0.15} Si _{0.85} . <i>Physical Review B</i> , 2006, 73, .	3.2	59
13	Investigating the n- and p-Type Electrolytic Charging of Colloidal Nanoplatelets. <i>Journal of Physical Chemistry C</i> , 2015, 119, 21795-21799.	3.1	57
14	Engineering the Charge Transfer in all 2D Graphene-Nanoplatelets Heterostructure Photodetectors. <i>Scientific Reports</i> , 2016, 6, 24909.	3.3	49
15	Vanishing scale for the superconducting Nernst signal above T_c . <i>Physical Review B</i> , 2007, 76, .	3.2	48
16	Charge Dynamics and Optoelectronic Properties in HgTe Colloidal Quantum Wells. <i>Nano Letters</i> , 2017, 17, 4067-4074.	9.1	48
17	Andreev Bound States at the Onset of Phase Coherence in Bi ₂ Sr ₂ CaCu ₂ O ₈ . <i>Physical Review Letters</i> , 2002, 89, 177001.	7.8	44
18	HgSe Self-Doped Nanocrystals as a Platform to Investigate the Effects of Vanishing Confinement. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 36173-36180.	8.0	40

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19	Nernst effect as a probe of superconducting fluctuations in disordered thin films. <i>New Journal of Physics</i> , 2009, 11, 055071.	2.9	36
20	Electron Cotunneling Transport in Gold Nanocrystal Arrays. <i>Physical Review Letters</i> , 2011, 107, 176803.	7.8	36
21	Planar tunneling spectroscopy of high-temperature superconductors: Andreev bound states and broken symmetries. <i>Physica C: Superconductivity and Its Applications</i> , 2003, 387, 162-168.	1.2	34
22	Nernst effect in the phase-fluctuating superconductor InO_x . <i>Europhysics Letters</i> , 2008, 83, 57005.	2.0	27
23	Transport in a Single Self-Doped Nanocrystal. <i>ACS Nano</i> , 2017, 11, 1222-1229.	14.6	23
24	Field-Effect Transistor and Photo-Transistor of Narrow-Band-Gap Nanocrystal Arrays Using Ionic Glasses. <i>Nano Letters</i> , 2019, 19, 3981-3986.	9.1	23
25	Ferroelectric Gating of Narrow Band-Gap Nanocrystal Arrays with Enhanced Light-Matter Coupling. <i>ACS Photonics</i> , 2021, 8, 259-268.	6.6	23
26	Verwey transition in single magnetite nanoparticles. <i>Physical Review B</i> , 2014, 90, .	3.2	22
27	Electronic structure of CdSe-ZnS 2D nanoplatelets. <i>Applied Physics Letters</i> , 2017, 110, .	3.3	21
28	Thickness-tuned superconductor-insulator transitions under magnetic field in $a\text{-NbSi}$. <i>Physical Review B</i> , 2008, 78, .	3.2	20
29	Features of heat transport in organic and cuprate superconductors. <i>Journal of Low Temperature Physics</i> , 1999, 117, 1089-1098.	1.4	19
30	Superconducting parity effect across the Anderson limit. <i>Nature Communications</i> , 2017, 8, 14549.	12.8	19
31	Impact of dimensionality and confinement on the electronic properties of mercury chalcogenide nanocrystals. <i>Nanoscale</i> , 2019, 11, 3905-3915.	5.6	18
32	Effects of electron-phonon interactions on the electron tunneling spectrum of PbS quantum dots. <i>Physical Review B</i> , 2015, 92, .	3.2	16
33	Quasi-particle vortex scattering in UPt_3 . <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1997, 234, 64-68.	2.1	15
34	Synthesis of Monodisperse Superconducting Lead Nanocrystals. <i>Journal of Physical Chemistry C</i> , 2009, 113, 7120-7122.	3.1	15
35	Metal Oxide Resistive Switching: Evolution of the Density of States Across the Metal-Insulator Transition. <i>Physical Review Letters</i> , 2014, 112, 066803.	7.8	15
36	In-Vacuum Projection of Nanoparticles for On-Chip Tunneling Spectroscopy. <i>ACS Nano</i> , 2013, 7, 1487-1494.	14.6	8

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37	Shiba Bound States across the Mobility Edge in Doped InAs Nanowires. <i>Physical Review Letters</i> , 2017, 119, 097701.	7.8	8
38	Nanoparticles charge response from electrostatic force microscopy. <i>Applied Physics Letters</i> , 2013, 102, .	3.3	7
39	Electronic properties of (Sb;Bi)2Te3 colloidal heterostructured nanoplates down to the single particle level. <i>Scientific Reports</i> , 2017, 7, 9647.	3.3	7
40	Double Fe-impurity charge state in the topological insulator Bi2Se3. <i>Applied Physics Letters</i> , 2017, 111, .	3.3	7
41	Disorder-Promoted Splitting in Quasiparticle Interference at Nesting Vectors. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 3127-3134.	4.6	7
42	Quantum confinement effects in Pb nanocrystals grown on InAs. <i>Physical Review B</i> , 2018, 97, .	3.2	6
43	Solution-growth of ultra-thin, insulating layers of zirconia for passivation and tunnel junction fabrication on YBCO thin films. <i>IEEE Transactions on Applied Superconductivity</i> , 2003, 13, 801-804.	1.7	5
44	Thermal conductivity as a probe of unconventional superconducting gap. <i>Zeitschrift für Physik B-Condensed Matter</i> , 1996, 103, 149-151.	1.1	4
45	Phototransport in colloidal nanoplatelets array. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2016, 13, 526-529.	0.8	4
46	Investigation of the Self-Doping Process in HgSe Nanocrystals. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2018, 215, 1700294.	1.8	4
47	Detection and control of broken symmetries with Andreev bound state tunneling spectroscopy: effects of atomic-scale disorder. <i>Physica C: Superconductivity and Its Applications</i> , 2004, 408-410, 804-806.	1.2	3
48	Strong coupling and periodic potential at the Pb/Sb(111) interface. <i>Physical Review B</i> , 2018, 98, .	3.2	2
49	In-plane quasi-particle tunneling into Bi2Sr2CaCu2O8. <i>Physica C: Superconductivity and Its Applications</i> , 2000, 341-348, 1681-1682.	1.2	1
50	Spectroscopy of the Andreev bound state of high-temperature superconductors: Measurements of quasiparticle scattering, anisotropy and broken time-reversal symmetry. <i>Physica C: Superconductivity and Its Applications</i> , 2000, 341-348, 1633-1637.	1.2	1
51	Title is missing!. <i>Journal of Superconductivity and Novel Magnetism</i> , 2000, 13, 703-708.	0.5	1
52	Thickness and Magnetic Field-tuned Superconductor-Insulator Transitions in a-Nb15Si85. <i>AIP Conference Proceedings</i> , 2006, , .	0.4	0
53	Gate tunable conductivity of hybrid gold nanocrystal-semiconducting matrix thin films. <i>Journal of Materials Chemistry</i> , 2012, 22, 15013.	6.7	0
54	Intraband transition in self-doped narrow band gap colloidal quantum dots. , 2017, , .		0

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55	Quantum constriction at the interface between a superconducting nanocrystal and an electron accumulation layer. <i>Physica C: Superconductivity and Its Applications</i> , 2018, 552, 34-37.	1.2	0
56	Nernst effect studies of Cooper pair fluctuations. <i>Physica C: Superconductivity and Its Applications</i> , 2018, 552, 38-41.	1.2	0